

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for morphological disambiguation, comprising:

building a statistical base by morphologically analyzing a corpus of text comprising multiple words having lemmas so as to find respective linguistic patterns of the words independently of the lemmas to which the linguistic patterns are applied, each pattern comprising a specification of at least one characteristic selected from a set of characteristics including a part of speech, prefix, number, gender and person, and finding relative frequencies of occurrence of the linguistic patterns in the corpus;

receiving an input string;

morphologically analyzing the string to generate a list of candidate analyses of the string, each candidate analysis comprising a respective word, having a linguistic pattern and a lemma, ~~and a linguistic pattern of the word, the pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word;~~ and

evaluating the pattern in each of the analyses using the statistical base so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied; and

selecting from the list one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold.

2. (Original) A method according to claim 1, wherein receiving the input string comprises receiving a word in a Semitic language.

3. (Original) A method according to claim 2, wherein the Semitic language comprises Hebrew.

4. (Canceled)

5. (Previously presented) A method according to claim 1, wherein the specification of the at least one characteristic comprises a specification of all of the characteristics in the set.

6. (Original) A method according to claim 5, wherein when the base word comprises a verb, the linguistic pattern further comprises a designation of a tense and conjugation pattern of the verb.

7. (Original) A method according to claim 1, wherein each of the analyses has a lemma and a paradigm determined by the word and the linguistic pattern thereof, and wherein evaluating the pattern comprises eliminating one of the analyses from the list if it has the same lemma and paradigm as another of the analyses.

8-9. (Canceled)

10. (Currently amended) A method according to ~~claim 9~~ claim 1, wherein determining the relative frequency of occurrence comprises storing in a table the ~~frequency~~ frequencies of occurrence found in the corpus, and looking up the pattern in the table.

11. (Previously presented) A method according to claim 1, wherein selecting the at least one of the analyses comprises setting the threshold so as to control how many of the analyses from the list are selected.

12. (Previously presented) A method according to claim 1, wherein selecting the at least one of the analyses comprises selecting the at least one of the analyses based on the pattern thereof, and substantially independently of the respective word.

13. (Original) A method according to claim 1, and comprising searching in a corpus of text for a match to the input string using the one or more selected analyses.

14. (Original) A method according to claim 1, and comprising checking for spelling errors in the input string using the one or more selected analyses.

15. (Currently amended) A method for searching a corpus of text made up of words, comprising:

morphologically analyzing the words in the corpus to generate, for each of at least some of the words, a list of candidate analyses, each candidate analysis comprising a respective lemma and a linguistic pattern relating the lemma to the analyzed word, the linguistic pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word;

evaluating the pattern ~~of each~~ in each of the analyses so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied;

selecting from the list for each of the analyzed words one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold;

entering the lemmas of the selected analyses in an index of the corpus; and
applying a search query to the index.

16. (Original) A method according to claim 15, wherein applying the search query comprises:

receiving an input text string;

morphologically analyzing and disambiguating the string to generate one or more search lemmas for the string; and

comparing the search lemmas to the index.

17. (Original) A method according to claim 15, wherein the words in the corpus comprise words in a Semitic language.

18. (Original) A method according to claim 17, wherein the Semitic language comprises Hebrew.

19-20. (Canceled)

21. (Previously presented) A method according to claim 15, wherein selecting the at least one of the analyses comprises selecting the at least one of the analyses based on the pattern thereof, and substantially independently of the respective word.

22. (Currently amended) A computer software product, comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to build a statistical base by morphologically analyzing a corpus of text comprising multiple words having lemmas so as to find respective linguistic patterns of the words independently of the lemmas to which the linguistic patterns are applied, each pattern comprising a specification of at least one characteristic selected from a set of characteristics including a part of speech, prefix, number, gender and person, and finding relative frequencies of occurrence of the linguistic patterns in the corpus,

wherein the instructions further cause the computer to morphologically analyze an input string to generate a list of candidate analyses of the string, each candidate analysis comprising a respective word, having a lemma, and a linguistic pattern of the word, the linguistic pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word, and to evaluate the pattern in each of the analyses so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied, and to select from the list one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold.

23. (Original) A product according to claim 22, wherein the input string comprises a word in a Semitic language.

24. (Original) A product according to claim 23, wherein the Semitic language comprises Hebrew.

25. (Canceled)

26. (Original) A product according to claim 22, wherein the instructions further cause the computer to search in a corpus of text for a match to the input string using the one or more selected analyses.

27. (Previously presented) A computer software product, comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to morphologically analyze the words in the corpus to generate, for each of at least some of the words, a list of candidate analyses, each candidate analysis comprising a respective lemma and a linguistic pattern relating the lemma to the analyzed word, the linguistic pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word, to evaluate the pattern in each of the analyses so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied, to select from the list for each of the analyzed words one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold, to enter the lemmas of the selected analyses in an index of the corpus, and to apply a search query to the index.

28. (Original) A product according to claim 27, wherein the instructions further cause the computer to receive an input text string, to morphologically analyze and disambiguate the string to generate one or more search lemmas for the string, and to compare the search lemmas to the index.

29. (Currently Amended) Apparatus for morphological disambiguation, comprising a linguistic processor, which is adapted to build a statistical base by morphologically analyzing a corpus of text comprising multiple words having lemmas so as to find respective linguistic patterns of the words independently of the lemmas to which the linguistic patterns are applied, each pattern comprising a specification of at least one characteristic selected from a set of characteristics including a part of speech, prefix, number, gender and person, and finding relative frequencies of occurrence of the linguistic patterns in the corpus,

wherein the linguistic processor is further adapted to receive an input string, to morphologically analyze the string to generate a list of candidate analyses of the string, each candidate analysis comprising a respective word, having a lemma, and a

linguistic pattern of the word, the linguistic pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word, and to evaluate the pattern in each of the analyses so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied, and to select from the list one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold.

30. (Original) Apparatus according to claim 29, wherein the input string comprises a word in a Semitic language.

31. (Original) Apparatus according to claim 30, wherein the Semitic language comprises Hebrew.

32. (Canceled)

33. (Original) Apparatus according to claim 29, wherein the processor is further adapted to search in a corpus of text for a match to the input string using the one or more selected analyses.

34. (Previously presented) Apparatus for searching a corpus of text made up of words, comprising a linguistic processor, which is adapted to morphologically analyze the words in the corpus to generate, for each of at least some of the words, a list of candidate analyses, each candidate analysis comprising a respective lemma and a linguistic pattern relating the lemma to the analyzed word, the linguistic pattern comprising a specification of at least one characteristic of the word, selected from a set of characteristics including a part of speech, prefix, number, gender and person of the word, to evaluate the pattern in each of the analyses so as to determine a relative frequency of occurrence of the pattern in each of the analyses, independent of the lemma to which the pattern is applied, to select from the list for each of the analyzed words one or more of the analyses that comprise respective patterns whose frequency of occurrence is above a predetermined threshold, to enter

the lemmas of the selected analyses in an index of the corpus, and to apply a search query to the index.

35. (Original) Apparatus according to claim 34, wherein the processor is further adapted to receive an input text string, to morphologically analyze and disambiguate the string to generate one or more search lemmas for the string, and to compare the search lemmas to the index.